

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-15 (Canceled).

16. (Withdrawn) An anti-adhesive layer for a wound dressing, said anti-adhesive layer comprising a xerogel containing silica and at least one hydrophobic organic silicon compound, wherein the anti-adhesive layer has a relative coating weight on the wound dressing from 0.05 % to 5 %.

17. (Withdrawn) The anti-adhesive layer according to Claim 16, wherein the at least one hydrophobic organic silicon compound comprises at least one compound selected from the group consisting of:

a trialkoxysilane having the formula $R^1Si(OR)_3$, wherein R^1 is an alkyl group having 8 to 18 carbon atoms;

an arylsilane having the formula $R^2Si(OR)_3$, wherein R^2 is an aryl group;

a diarylsilane having the formula $R^2_2Si(OR)_2$, wherein R^2 is an aryl group;

triphenylsilane chloride;

t-butylidiphenylsilane chloride;

hydrophobically modified polysiloxanes having alkyl and/or phenyl side groups;

oleophobic compounds having the formula $R^3Si(OR)_3$, wherein R^3 is a perfluorinated alkyl group; and

oleophobic polysiloxanes having perfluorinated alkyl side chains.

18. (Withdrawn) The anti-adhesive layer according to Claim 16, containing an epoxysilane compound effective to provide the anti-adhesive layer with partially hydrophilic properties.

19. (Previously Presented) A composite comprising:

a wound dressing; and

a coating composition comprising a nanosol containing silica and at least one hydrophobic organic silicon compound, or

an anti-adhesive layer comprising a xerogel with silica and at least one hydrophobic organic silicon compound.

20. (Previously Presented) The composite according to Claim 19, wherein the at least one hydrophobic organic silicon compound comprises at least one compound selected from the group consisting of:

a trialkoxysilane having the formula $R^1Si(OR)_3$, wherein R^1 is an alkyl group having 8 to 18 carbon atoms;

an arylsilane having the formula $R^2Si(OR)_3$, wherein R^2 is an aryl group;

a diarylsilane having the formula $R^2_2Si(OR)_2$, wherein R^2 is an aryl group;

triphenylsilane chloride;

t-butylidiphenylsilane chloride;

hydrophobically modified polysiloxanes having alkyl and/or phenyl side groups;

oleophobic compounds having the formula $R^3Si(OR)_3$, wherein R^3 is a perfluorinated alkyl group; and

oleophobic polysiloxanes having perfluorinated alkyl side chains.

21. (Previously Presented) The composite according to Claim 19, containing an epoxysilane compound effective to provide the anti-adhesive layer with partially hydrophilic properties.

22. (Previously Presented) The composite according to Claim 19, wherein the wound dressing comprises a flat textile form, a foamed plastic or a gel.

23. (Currently Amended) A method for preparing the composite of Claim 19a-coating composition comprising a nanosol containing silica and at least one hydrophobic organic silicon compound, said method comprising:

hydrolyzing tetraalkoxysilanes in an organic, organic-aqueous or aqueous solvent to provide the nanosol, and

mixing the at least one hydrophobic organic silicon compound with the nanosol to prepare the coating composition, and

applying the coating composition to the wound dressing to provide the composite.

24. (Currently Amended) ~~The~~A method of Claim 23, further for providing an anti-adhesive coating on a wound dressing, said method comprising the steps: hydrolyzing tetraalkoxysilanes in an organic, organic aqueous or aqueous solvent to provide a nanosol; mixing at least one hydrophobic organic silicon compound with the nanosol to provide a coating composition; applying the coating composition to the wound dressing to provide a coated wound dressing; and drying the coating composition on the coated wound dressing by solvent removal to form a xerogel layer and to thereby provide the anti-adhesive coating on the wound dressing.

25. (Withdrawn) The method according to Claim 24, wherein the step of applying the coating composition comprises a single-sided coating, a two-sided coating or an impregnation of the wound dressing.

26. (Withdrawn) The method according to Claim 24, wherein the step of applying the coating is implemented as a closed coating or impregnation or as a partly discontinuous coating or impregnation.

27. (Withdrawn) The method according to Claim 24, further comprising a heat treatment step conducted at a temperature from 25°C to 180°C following the drying step.

28. (Withdrawn) The method according to Claim 24, wherein the anti-adhesive coating decreases adhesion between a wound and the wound dressing.

29. (Withdrawn) The method according to Claim 24, wherein the at least one hydrophobic organic silicon compound comprises at least one compound selected from the group consisting of:

a trialkoxysilane having the formula R¹Si(OR)₃, wherein R¹ is an alkyl group having 8 to 18 carbon atoms;

an arylsilane having the formula R²Si(OR)₃, wherein R² is an aryl group;

a diarylsilane having the formula R²₂Si(OR)₂, wherein R² is an aryl group;

triphenylsilane chloride;

t-butyl diphenylsilane chloride;

hydrophobically modified polysiloxanes having alkyl and/or phenyl side groups;

oleophobic compounds having the formula R³Si(OR)₃, wherein R³ is a perfluorinated alkyl group; and

oleophobic polysiloxanes having perfluorinated alkyl side chains.

30. (Withdrawn) The method according to Claim 24, in which the coating composition contains an epoxysilane compound effective to provide the wound dressing with partially hydrophilic properties.

31. (New) The composite according to Claim 19, wherein the coating composition is provided by a method comprising:

hydrolyzing tetraalkoxysilanes in an organic, organic-aqueous or aqueous solvent to provide the nanosol, and

mixing the at least one hydrophobic organic silicon compound with the nanosol.

32. (New) The method of Claim 31, wherein the coating composition is dried on the wound dressing by solvent removal to form the anti-adhesive layer on the wound dressing.